

Switch ON the SMEC
File: H_FCP_SPI_SMCN.xls
Author: R. Biggins



Procedure Summary

Objectives

The objective of this procedure is to switch on the spectrometer mechanism (SMEC)

Summary of Constraints

n/a

Spacecraft Configuration

Start of Procedure

SPIRE is in BSM_INIT mode

End of Procedure

SPIRE is in SMEC_ON mode

Reference File(s)

Input Command Sequences

Output Command Sequences

HFSSMCN

Referenced Displays

ANDs GRDs SLDs
SA_6_559
ZAZ08999
SAS0_559

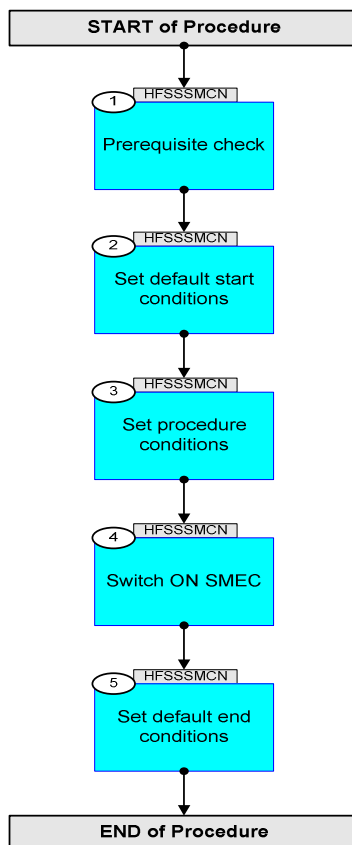
Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
07/08/2007		1	Created	R. Biggins	
15/01/2008		2	Update due to initial testing against the simulator: 2 - TCs updated due to new DB	R. Biggins	

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Procedure Flowchart Overview



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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
Beginning of Procedure				
HFSSMCN Switch ON SMEC				
SSID :				
1		Prerequisite check		Next Step: 2
		Verify Telemetry MODE SM00M500	= BSM_INIT	AND=SA_6_559
		Verify Telemetry SMECENCPCR SMS0W515	= 0 <hex>	AND=SA_6_559
		Verify Telemetry SMECLVDPWR SMS1W515	= 0 <hex>	AND=SA_6_559
		Verify Telemetry BSW_SDB_ActProf DEF5F160	= 3 <dec>	AND=ZAZ08999
2		Set default start conditions		Next Step: 3
	ET=+00.00.01 UT=+00.00.01	SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 TC Control Flags : GBM IL DSE ---- SSID : 370	SC003500 0 <hex>	
	ET=+00.00.00 UT=+00.00.00	SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID SP01N500 TC Control Flags : GBM IL DSE ---- SSID : 370	SC001500 80000000 <hex>	
	ET=+00.00.01 UT=+00.00.01	SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 TC Control Flags : GBM IL DSE ---- SSID : 370	SC003500 0 <hex>	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+00.00.01 UT=+00.00.01	SET_BBID SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID SP01N500 TC Control Flags : GBM IL DSE --- -- --- SSID : 370	SC001500 80020001 <hex>	
	ET=+00.00.02 UT=+00.00.02	SET_OBS_STEP SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 TC Control Flags : GBM IL DSE --- -- --- SSID : 370	SC003500 1 <hex>	
3		Set procedure conditions		Next Step: 4
	ET=+00.00.01 UT=+00.00.01	RESET_DRCU_COUNTERS RESET_DRCU_COUNTERS TC Control Flags : GBM IL DSE --- -- --- SSID : 370	SCD00505	
	ET=+00.00.01 UT=+00.00.01	SET_OBSID SET_OBSID Command Parameter(s) : OBSERVATION_ID SP00N500 TC Control Flags : GBM IL DSE --- -- --- SSID : 370	SC000500 OBS_ID	
	ET=+00.00.01 UT=+00.00.01	SET_OBS_STEP SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 TC Control Flags : GBM IL DSE --- -- --- SSID : 370	SC003500 0 <hex>	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+00.00.01 UT=+00.00.01	SET_BBID SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID SP01N500 TC Control Flags : GBM IL DSE --- -- SSID : 370	SC001500 80000000 <hex>	
	ET=+00.00.02 UT=+00.00.02	SET_OBS_STEP SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 TC Control Flags : GBM IL DSE --- -- SSID : 370	SC003500 0 <hex>	
	ET=+00.00.00 UT=+00.00.00	SET_BBID SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID SP01N500 TC Control Flags : GBM IL DSE --- -- SSID : 370	SC001500 82010001 <hex>	
	ET=+00.00.02 UT=+00.00.02	SET_OBS_MODE SET_OBS_MODE Command Parameter(s) : OBSERVING_MODE SP02N500 TC Control Flags : GBM IL DSE --- -- SSID : 370	SC002500 204 <hex>	
		Verify Telemetry MODE SM00M500	= SMEC_ON	AND=SA_6_559
4		Switch ON SMEC		Next Step: 5
	ET=+00.00.01 UT=+00.00.01	Send DRCU command to SetSpeedFwdGain SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- SSID : 370	SCD06505 90544E26 <hex> 0 <hex> (Def)	

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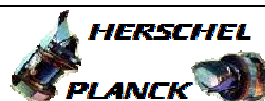
Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify Telemetry SMECFFGAIN SMS5N515	= 4E26 <hex>	AND=SAS0_559
	ET=+00.00.01 UT=+00.00.01	Send DRCU command to SetSEncoderPwr SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- SSID : 370	SCD06505 90400001 <hex> 0 <hex> (Def)	
		Verify Telemetry SMECENCPCR SMS0W515	= 1.00 uW	AND=SAS0_559
	ET=+00.00.06 UT=+00.00.06	Send DRCU command to SetEncoderSignal1Offset SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- SSID : 370	SCD06505 9058D6D8 <hex> 0 <hex> (Def)	
		Verify Telemetry SMECENC SIG1OFF SMS7A515	= D6D8 <hex>	AND=SAS0_559
	ET=+00.00.00 UT=+00.00.00	Send DRCU command to SetEncoderSignal2Offset SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- SSID : 370	SCD06505 905AB798 <hex> 0 <hex> (Def)	
		Verify Telemetry SMECENC SIG2OFF SMS9A515	= B798 <hex>	AND=SAS0_559
	ET=+00.00.01 UT=+00.00.01	Send DRCU command to SetSLVDPwr SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- SSID : 370	SCD06505 90410001 <hex> 0 <hex> (Def)	
		Verify Telemetry SMECLVDPWR SMS1W515	= 1 <hex>	AND=SAS0_559

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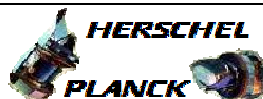
Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+00.00.00 UT=+00.00.00	Send DRCU command to SetLVDTScale SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : SSID : 370 GBM IL DSE --- -- ---	SCD06505 905F161C <hex> 0 <hex> (Def)	
		Verify Telemetry SMECLVDTSCALE SMSBN515	= 0.690520 mm	AND=SAS0_559
	ET=+00.00.01 UT=+00.00.01	Send DRCU command to SetLVDTOffset SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : SSID : 370 GBM IL DSE --- -- ---	SCD06505 905E1F40 <hex> 0 <hex> (Def)	
		Verify Telemetry SMECLVDTOFFSET SMS2B515	= 8.0000 mm	AND=SAS0_559
	ET=+00.00.01 UT=+00.00.01	Send DRCU command to SetSki SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : SSID : 370 GBM IL DSE --- -- ---	SCD06505 904D0000 <hex> 0 <hex> (Def)	
		Verify Telemetry SMECKI SMG2N515	= 0 <hex>	AND=SAS0_559
5		Set default end conditions		Next Step: END
	ET=+00.00.00 UT=+00.00.00	SET_OBS_STEP SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 TC Control Flags : SSID : 370 GBM IL DSE --- -- ---	SC003500 0 <hex>	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+00.00.01 UT=+00.00.01	SET_BBID SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID SP01N500 TC Control Flags : GBM IL DSE --- -- --- SSID : 370	SC001500 80000000 <hex>	
	ET=+00.00.02 UT=+00.00.02	SET_OBS_STEP SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 TC Control Flags : GBM IL DSE --- -- --- SSID : 370	SC003500 0 <hex>	
	ET=+00.00.00 UT=+00.00.00	SET_BBID SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID SP01N500 TC Control Flags : GBM IL DSE --- -- --- SSID : 370	SC001500 80030001 <hex>	
	ET=+00.00.02 UT=+00.00.02	SET_OBS_STEP SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 TC Control Flags : GBM IL DSE --- -- --- SSID : 370	SC003500 1 <hex>	
	ET=+00.00.00 UT=+00.00.00	SET_OBSID SET_OBSID Command Parameter(s) : OBSERVATION_ID SP00N500 TC Control Flags : GBM IL DSE --- -- --- SSID : 370	SC000500 B0000000 <hex>	

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	ET=+00.00.01 UT=+00.00.01	SET_OBS_STEP SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 TC Control Flags : GBM IL DSE --- -- -- SSID : 370	SC003500 0 <hex>	
	ET=+00.00.00 UT=+00.00.00	SET_BBID SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID SP01N500 TC Control Flags : GBM IL DSE --- -- -- SSID : 370	SC001500 80000000 <hex>	
End of Procedure				